

WHAT IS CLAIMED IS:

1. A host device comprising:  
a positionable cooling element for dissipating thermal energy generated by a peripheral card inserted into said host device;  
a positioning mechanism coupled to said cooling element; and  
a latching mechanism coupled to said positioning mechanism;  
wherein the movement of said latching mechanism from a first position to a second position causes said positioning mechanism to translate said cooling element towards said peripheral card.
2. The host device of claim 1, wherein said translation of said cooling element towards said peripheral card causes said cooling element to be coupled to said peripheral card.
3. The host device of claim 1, wherein said positioning mechanism comprises:  
a two-bar kinematic link coupled to said cooling element;  
a cam coupled to said two-bar kinematic link; and  
a shaft coupled to said cam and to said latching mechanism.
4. The host device of claim 1, wherein said positioning mechanism comprises an electromechanical device.
5. The host device of claim 4, wherein said electromechanical device is a motor or a solenoid.
6. The host device of claim 1, wherein said latching mechanism is a lever configured to rotate from said first position to said second position.
7. The host device of claim 1, further comprising:  
a second positionable cooling element coupled to said positioning mechanism;

wherein said movement of said latching mechanism from said first position to said second position causes said positioning mechanism to translate said second cooling element towards said peripheral card.

8. The host device of claim 7, wherein said second cooling element dissipates thermal energy from a bottom surface of said peripheral card.

9. The host device of claim 1, wherein said movement of said latching mechanism from said first position to said second position causes a signal to be sent to said host device indicating that said peripheral card is properly inserted.

10. The host device of claim 1, wherein said cooling element is an active cooling element or a passive cooling element.

11. The host device of claim 1, wherein said cooling element is a heat sink.

12. An apparatus for translating a cooling element towards a peripheral card comprising:

a two-bar kinematic link coupled to said cooling element;

a cam coupled to said two-bar kinematic link;

a shaft coupled to said cam; and

a latching mechanism coupled to said shaft;

wherein a displacement of said latching mechanism from a first position to a second position causes said translation of said cooling element towards said peripheral card.

13. The apparatus of claim 12, wherein said latching mechanism is a lever configured to rotate from said first position to said second position.

14. The apparatus of claim 12, wherein said cooling element comprises a heat sink.

15. An apparatus for translating a cooling element towards a peripheral card comprising:

an electromechanical device coupled to said cooling element; and

a latching mechanism coupled to said electromechanical device;

wherein a displacement of said latching mechanism from a first position to a second position causes said translation of said cooling element towards said peripheral card.

16. The apparatus of claim 15, wherein said latching mechanism is a lever configured to rotate from said first position to said second position.

17. The apparatus of claim 15, wherein said cooling element comprises a heat sink.

18. A host device comprising:

a positionable cooling element for dissipating thermal energy generated by a peripheral card inserted into said host device;

a positioning mechanism coupled to said cooling element; and

a spring loaded locking mechanism coupled to said positioning mechanism, said spring loaded locking mechanism configured to engage said peripheral card;

wherein said engagement of said peripheral card causes said positioning mechanism to translate said cooling element towards said peripheral card.

19. The host device of claim 18, further comprising:

a release button coupled to said spring loaded locking mechanism;

wherein pressing said release button causes said positioning mechanism to translate said cooling element away from said peripheral card and said peripheral card to eject from said host device.

20. The host device of claim 18, wherein said translation of said cooling element towards said peripheral card causes said cooling element to be coupled to said peripheral card.

21. The host device of claim 18, wherein said cooling element is an active cooling element or a passive cooling element.

22. The host device of claim 18, wherein said cooling element is a heat sink.

23. A host device comprising:  
a fixed cooling element for dissipating thermal energy generated by a peripheral card;  
a rotatable socket coupled to said peripheral card;  
wherein a user rotates said peripheral card towards said fixed cooling element.

24. The host device of claim 23, wherein said cooling element is an active cooling element or a passive cooling element.

25. The host device of claim 23, wherein said cooling element is a heat sink.

26. A host device comprising:  
a fixed cooling element for dissipating thermal energy generated by a peripheral card;  
a moveable card guide assembly for housing said peripheral card;  
one or more members extending from a number of V-shaped guide tracks, said members coupled to said moveable card guide assembly;  
wherein said moveable card guide assembly and said peripheral card translate along said V-shaped guide tracks towards said fixed cooling element.

27. The host device of claim 26, further comprising:  
a number of springs coupled to said moveable card guide assembly;  
wherein said springs compress as said moveable card guide assembly and said peripheral card translate towards an apex of said V-shaped guide tracks and decompress as

said moveable card guide assembly and said peripheral card translate past said apex of said V-shaped guide tracks.

28. The host device of claim 26, wherein said cooling element is an active cooling element or a passive cooling element.

29. The host device of claim 26, wherein said cooling element is a heat sink.

30. A host device comprising:  
a positionable cooling element for dissipating thermal energy generated by a peripheral card inserted into said host device;  
a guide track coupled to said cooling element; and  
an engaging device coupled to said cooling element;  
wherein said engaging device engages said peripheral card as said peripheral card is inserted into said host device and causes said cooling element to translate along said guide track towards said peripheral card.

31. The host device of claim 30, further comprising:  
a number of springs coupled to said cooling element;  
wherein said springs cause said cooling element to translate away from said peripheral card when said peripheral card is removed from said host device.

32. The host device of claim 31, wherein said cooling element is an active cooling element or a passive cooling element.

33. The host device of claim 31, wherein said cooling element is a heat sink.

34. A method of dissipating thermal energy generated by a peripheral card in a host device, said method comprising:  
providing a positionable cooling element;  
coupling a positioning mechanism to said cooling element;

coupling a latching mechanism to said positioning mechanism; and  
translating said cooling element towards said peripheral card by moving said latching mechanism from a first position to a second position.

35. The method of claim 34, wherein said step of translating said cooling element comprises coupling said cooling element to said peripheral card.

36. The method of claim 34, wherein said cooling element comprises a plurality of cooling elements.

37. A method of dissipating thermal energy generated by a peripheral card in a host device, said method comprising:  
providing a positionable cooling element;  
coupling a positioning mechanism to said cooling element;  
coupling a spring loaded locking mechanism to said positioning mechanism; and  
engaging said peripheral card with said spring loaded locking mechanism;  
wherein said engagement of said peripheral card causes said positioning mechanism to translate said cooling element towards said peripheral card.

38. A method of dissipating thermal energy generated by a peripheral card in a host device, said method comprising:  
providing a fixed cooling element;  
providing a rotatable socket coupled to said peripheral card; and  
rotating said peripheral card towards said fixed cooling element.

39. A method of dissipating thermal energy generated by a peripheral card in a host device, said method comprising:  
providing a fixed cooling element;  
providing a moveable card guide assembly for housing said peripheral card; and  
providing a number of V-shaped guide tracks coupled to said moveable card guide assembly;

translating said moveable card guide assembly and said peripheral card along said V-shaped guide tracks towards said fixed cooling element.

40. A method of dissipating thermal energy generated by a peripheral card in a host device, said method comprising:

providing a positionable cooling element; and

translating said cooling element along a guide track towards said peripheral card.

41. A host device comprising:

a positionable cooling element for dissipating thermal energy generated by a peripheral card inserted into said host device;

a positioning means for positioning said cooling element, said positioning means coupled to said cooling element;

a latching means coupled to said positioning means;

wherein the movement of said latching means from a first position to a second position causes said positioning means to translate said cooling element towards said peripheral card.

42. The host device of claim 41, wherein said translation of said cooling element towards said peripheral card causes said cooling element to be coupled to said peripheral card.

43. The host device of claim 41, further comprising:

a second positionable cooling element coupled to said positioning means;

wherein said movement of said latching means from said first position to said second position causes said positioning means to translate said second cooling element towards said peripheral card.

44. A host device comprising:

a positionable cooling element for dissipating thermal energy generated by a peripheral card inserted into said host device;

a positioning means for positioning said cooling element, coupled to said cooling element; and

a spring loaded locking means coupled to said positioning means, said spring loaded locking means configured to engage said peripheral card;

wherein said engagement of said peripheral card causes said positioning means to translate said cooling element towards said peripheral card.

45. A host device comprising:

a fixed cooling element for dissipating thermal energy generated by a peripheral card; and

means for rotating said peripheral card towards said fixed cooling element.

46. A host device comprising:

a fixed cooling element for dissipating thermal energy generated by a peripheral card; and

means for translating said peripheral card along one or more V-shaped guide tracks towards said fixed cooling element.

47. A host device comprising:

a positionable cooling element for dissipating thermal energy generated by a peripheral card inserted into said host device; and

means for translating said cooling element along a guide track towards said peripheral card.